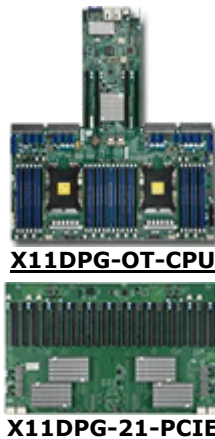


## SuperServer 6049GP-TRT



Integrated Board



**X11DPG-OT-CPU**

**X11DPG-21-PCIE**

### Key Features

- AI / Deep Learning
- Video Transcoding

1. Dual Socket P (LGA 3647) support  
2nd Gen Intel® Xeon® Scalable  
processors (Cascade Lake/Skylake)<sup>‡</sup>
2. 24 DIMMs; up to 6TB 3DS ECC  
DDR4-2933MHz<sup>†</sup> RDIMM/LRDIMM,  
Supports Intel® Optane™ DCPMM<sup>††</sup>
3. 20 PCI-E 3.0 x16 support  
up to 20 single width GPU;  
1 PCI-E 3.0 x8 (FH, FL in x16 slot)
4. 24 Hot-swap 3.5" drive bays or  
22 Hot-swap 3.5" drive bays +  
2 U.2 NVMe 2.5" drives
5. 2x 10GBase-T LAN ports
6. 8 Hot-swap 92mm RPM cooling fans
7. 2000W (2+2) Redundant Power  
Supplies **Titanium Level (96%+)**

► [Drivers & Utilities](#) ► [BIOS](#) ► [IPMI](#) ► [Tested Memory](#) ► [Tested M.2 List](#) ► [Manuals](#) ► [OS Certification Matrix](#) ► [Compatible GPU List](#) ► [Drive Options](#)

Note: Image above may show a varied configuration of optional parts.  
Please refer to parts list for standard parts included.

# Specifications

## Product SKUs

- SYS-6049GP-TRT** ■ SuperServer 6049GP-TRT (Black)

## Motherboard

### Super X11DPG-OT-CPU

## Processor/Cache

- CPU** ■ Dual Socket P (LGA 3647)  
■ 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors<sup>†</sup>,  
3 UPI up to 10.4GT/s  
■ Support CPU TDP 70-205W
- Cores** ■ Up to 28 Cores
- Note** <sup>†</sup> BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake-R)
- GPU Support** ■ Please refer to: [Compatible GPU list](#)

## System Memory

- Memory Capacity** ■ 24 DIMM slots  
■ Up to 6TB 3DS ECC DDR4-2933MHz<sup>†</sup> RDIMM/LRDIMM  
■ Supports Intel® Optane™ DCPMM<sup>††</sup>
- Memory Type** ■ 2933<sup>†</sup>/2666/2400/2133MHz ECC DDR4 RDIMM/LRDIMM
- Note** <sup>†</sup> 2933MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro  
<sup>††</sup> Cascade Lake only. Contact your Supermicro sales rep for more info.

## On-Board Devices

- Chipset** ■ Intel® C622 chipset
- SATA** ■ SATA3 (6Gbps) with RAID 0, 1, 5, 10
- Network Controllers** ■ Dual Port 10GbE from C622
- IPMI** ■ Support for Intelligent Platform Management Interface v.2.0  
■ IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
- Graphics** ■ ASPEED AST2500 BMC

## Input / Output

- SATA** ■ 24 SATA3 (6Gbps) ports
- LAN** ■ 2 RJ45 10GBase-T LAN ports  
■ 1 RJ45 Dedicated IPMI LAN port
- USB** ■ 4 USB 3.0 ports (rear)
- Video** ■ 1 VGA Connector
- COM Port** ■ 1 COM port (header)

## System BIOS

- BIOS Type** ■ AMI 32Mb SPI Flash ROM

## Chassis

- Form Factor** ■ 4U Rackmountable  
■ Rackmount Kit (MCP-290-00057-0N)
- Model** ■ CSE-848GTS-R4000P

## Dimensions

- Height** ■ 7.0" (178mm)
- Width** ■ 17.2" (437mm)
- Depth** ■ 32.1" (815mm)
- Weight** ■ Net Weight: 65.5 lbs (29.7 kg)  
■ Gross Weight: 100 lbs (45.3 kg)
- Available Colors** ■ Black

## Drive Bays / Storage

- Hot-swap** ■ 24 Hot-swap 3.5" drive bays or 22 Hot-swap 3.5" drive bays + 2 U.2 NVMe 2.5" drives
- M.2** ■ M.2 Interface: 1 PCI-E 3.0 x4  
■ Form Factors: 2280, 22110  
■ Key: M-Key

## Expansion Slots

- PCI-Express** ■ 20 PCI-E 3.0 x16 support up to 20 single width GPU  
■ 1 PCI-E 3.0 x8 (FH, FL in x16) slot

## System Cooling

- Fans** ■ 8x 92mm RPM Hot-Swappable Cooling Fans

## Power Supply

2000W Redundant Power Supplies with PMBus

- Total Output Power** ■ 1000W: 100 – 120Vac  
■ 1800W: 200 – 220Vac  
■ 1980W: 220 – 230Vac  
■ 2000W: 230 – 240Vac  
■ 2000W: 200 – 240Vac (UL/CUL only)

- Dimension (W x H x L)** ■ 73.5 x 40 x 265 mm

- Input** ■ 100-120Vac / 12.5-9.5A / 50-60Hz  
■ 200-220Vac / 10-9.5A / 50-60Hz  
■ 220-230Vac / 10-9.8A / 50-60Hz  
■ 230-240Vac / 10-9.8A / 50-60Hz  
■ 200-240Vac / 11.8-9.8A / 50-60Hz (UL/CUL only)

- +12V** ■ Max: 83.3A / Min: 0A (100-120Vac)  
■ Max: 150A / Min: 0A (200-220Vac)  
■ Max: 165A / Min: 0A (220-230Vac)  
■ Max: 166.7A / Min: 0A (230-240Vac)  
■ Max: 166.7A / Min: 0A (200-240Vac) (UL/CUL only)

- 12Vsb** ■ Max: 2.1A / Min: 0A

- Output Type** ■ 25 Pairs Gold Finger Connector

## Certification



**Titanium Level**  
[ [Test Report](#) ]

Management

Software	<ul style="list-style-type: none"><li>■ Intel® Node Manager</li><li>■ IPMI 2.0</li><li>■ KVM with dedicated LAN</li><li>■ <u>SSM, SPM, SUM</u></li><li>■ <u>SuperDoctor® 5</u></li><li>■ Watchdog</li></ul>
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PC Health Monitoring

CPU	<ul style="list-style-type: none"><li>■ Monitors for CPU Cores, Chipset Voltages, Memory.</li><li>■ 4+1 Phase-switching voltage regulator</li></ul>
FAN	<ul style="list-style-type: none"><li>■ Fans with tachometer monitoring</li><li>■ Status monitor for speed control</li><li>■ Pulse Width Modulated (PWM) fan connectors</li></ul>
Temperature	<ul style="list-style-type: none"><li>■ Monitoring for CPU and chassis environment</li><li>■ Thermal Control for fan connectors</li></ul>

Operating Environment

RoHS	<ul style="list-style-type: none"><li>■ RoHS Compliant</li></ul>
Environmental Spec.	<ul style="list-style-type: none"><li>■ Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F)</li><li>■ Non-operating Temperature: -40°C to 60°C (-40°F to 140°F)</li><li>■ Operating Relative Humidity: 8% to 90% (non-condensing)</li><li>■ Non-operating Relative Humidity: 5% to 95% (non-condensing)</li></ul>

## Parts List

### Parts List - (Items Included)

	Part Number	Qty	Description
<b>Motherboard / Chassis</b>	MBD-X11DPG-OT-CPU	1	Super X11DPG-OT-CPU motherboard
	MBD-X11DPG-21-PCIE-P	1	Super X11DPG-21-PCIE daughterboard
	CSE-848GTS-R4000P	1	CSE-848GTS-R4000P Chassis
<b>Add-on Card / Module</b>	AOC-S3108L-H8IR	1	LSI 3108 based SAS3 RAID, 12Gb, 8 internal ports, 240HDD - RAID 0,1,10,5,6,50,60, Gen3 x8 Standard Low Profile
<b>Backplane</b>	BPN-SAS3-846EL1-N8	1	24-Port 4U Expander Backplane Support up-to 16x 3.5" SAS3/SATA3 HDD/SSD and 8 x SAS3/SATA3/NVMe Storage Devices
<b>Cable 1</b>	CBL-PWEX-0673-1	2	PWYCB,2X4F/P4.2 TO 2 1X4F/P5.08,65/70CM,16AWG,5/12V,RoHS
<b>Cable 2</b>	CBL-PWEX-1028	2	GPU,2x4F/CPU to 2x4F/CPU,P4.2, 30CM,16AWG, 10A/pin, -40~105C
<b>Cable 3</b>	CBL-SAST-0531	2	MINI SAS HD,12G,INT,80CM,30AWG
<b>Cable 4</b>	CBL-SAST-0819	2	OCuLink v 1.0,INT,PCIe NVMe SSD, 65CM,34AWG,RoHS/REACH
<b>Parts</b>	MCP-130-41802-0B	1	Black plastic palm cover for X10DRG-O-PCIE
<b>Riser Card</b>	RSC-X9DRG-O	4	RSC-X9DRG-O
<b>Heatsink / Retention</b>	SNK-P0068APS4	2	2U Active CPU Heat Sink Supporting Narrow Bolster Plate Mounting Mechanism for X11 Purley Platform
<b>* Power Supply</b>	PWS-2K05A-1R	4	1U 2000W Redundant Titanium Power Supply W/PMbus 73.5x40x265mm,RoHS/REACH
<b>* Cable 5</b>	CBL-0071L	1	CBL,FRONT CNTL,16 TO 16 PIN,RA,RND TUBE,75CM,28AWG
<b>* Cable 6</b>	CBL-0174L	4	PWCD,US,NEMA5-15P TO IEC60320 C13,6FT,14AWG,15A,125V,RoHS/REACH
<b>* FAN 1</b>	FAN-0151L4	8	92x92x38 mm, 11.5K RPM, SC418G Middle Fan w/ Housing,RoHS/REACH,PBF
<b>* Front Panel</b>	FPB-TMP-002	1	Thermal Sensor board with 40cm I2C cable
<b>* Drive Tray(s)</b>	MCP-220-00075-0B	24	Black gen 5.5 hot-swap 3.5"; HDD tray
<b>* Rear Window</b>	MCP-240-84802-0N	1	21 slot rear window for SC418X
<b>* Parts</b>	MCP-260-41801-0N	1	IO shield for X9DRG-O in SC418G
<b>* Front Panel</b>	MCP-280-82601-0N	1	Front control board adapter (TB826) for SC216,826,936,846
<b>* Rail Set</b>	MCP-290-00057-0N	1 set	Rail set, quick/quick, default for 4U 17.2"; W
<b>* Rail Set</b>	MCP-290-00060-0N	1	Threaded rail adapter default for round hole rack
<b>* Rail Set</b>	MCP-290-00115-0N	1	Inner rail, quick-release type
<b>* Rail Set</b>	MCP-290-00117-0N	1	Outer rail, quick-release type
<b>* FAN 2</b>	MCP-340-00044-0N	1	92x92x38 mm, 11.5K RPM, 4-pin PWM Bare Fan

#### Notes:

1. Parts with \* are inside the chassis
2. Excessive parts might not be shipped, including but not limited to excessive drive trays, fans, riser brackets, air shrouds, IO shields, cables.....etc.

### Optional Parts List

	Part Number	Qty	Description
<b>Hot-swap 3.5" to 2.5" SATA/SAS Drive Trays</b>	MCP-220-00118-0B	1-12	Tool-less black hot-swap 3.5-to-2.5 converter HDD drive tray (Red tab)
	MCP-220-00043-0N		Black hot-swap 3.5-to-2.5 converter HDD drive tray (Red tab)
<b>Hot-swap 3.5" to 2.5" NVMe Drive Tray</b>	MCP-220-00138-0B	1-4	Tool-less black hot-swap 3.5-to-2.5 converter NVMe drive tray (Orange tab)
<b>Global Services &amp; Support</b>	OS4HR3/2/1	-	3/2/1-year onsite 24x7x4 service
	OSNBD3/2/1	-	3/2/1-year onsite NBD service
<b>Software</b>	SFT-OOB-LIC • eStore	1	OOB Management Package (per node license)
<b>Software</b>	SFT-DCMS-Single	1	DataCenter Management Package (per node license)

